

REMARKS

These remarks are in response to the Office Action dated November 17, 2003, which has a shortened statutory period for response set to expire February 17, 2004. No extension of time is required.

Claims

Claims 1, 2, 4-9, 11-20, 22, and 25-42 are pending in the above-identified application. Claims 1, 2, 4-9, 20, 22, and 28 are rejected over prior art. Claims 14-19, 26, 27, and 34-42 are allowed, and Claims 11-13, 25, and 29-33 are objected to. Claims 1, 7, and 37 are amended and Claims 2, 6, 8, 12-13, 15-19, 27, 29-36, and 38-42 remain as filed or previously amended. Reconsideration is requested.

Rejections Under 35 U.S.C. § 103

Claims 7-9, and 22

Claims 7-9, and 22 are rejected under 35 U.S.C. § 103 as being unpatentable over Haessig (USPN 5,005,636) in combination with Hargraves (USPN 4,459,819). The Examiner writes:

Haessig shows (in FIG. 1), a ventilation control unit having a plenum, which starts near thermal coil 55 and extends to flow controller 67 and a flow sensor 80 fixed to the plenum.

Hargraves shows an automatic controlled expansion valve 15 for providing superheat control for an air conditioning system (col. 4, line 57). In order to achieve efficient operation of, coaling coil 53, it would have been obvious to provide Haessig with an automatic valve.

Applicants request reconsideration in view of the amendments made herein.

In order to establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. M.P.E.P. §2143.

Claims 7-9

As amended herein, Claim 7 recites:

7. A ventilation flow control unit comprising:
a plenum;
a flow controller mounted to said plenum;
a flow sensor mounted to said plenum;
a thermal coil fixed to said plenum, for affecting the temperature of air
passing through said ventilation flow control unit; and
an automatic valve connected with at least one fluid line of said
thermal coil; and
**wherein said ventilation flow control unit can be installed as a
single component.** (emphasis added)

Neither Haessig nor Hargraves teach or suggest a ventilation flow control unit that “can be installed as a single component,” as recited by amended Claim 7. Rather, Haessig is directed to an entire ventilation system and the control thereof to reduce energy consumption. Haessig does not describe the installation of various components of the ventilation system, much less that the plenum, thermal coil 55, flow controller 67, and flow sensor 80 are installed as a single component. Finally, Hargraves is directed to an expansion valve for use in a refrigeration system, and also does not teach or suggest installation methods applicable to the ventilation flow control unit taught by Claim 7.

Applicants realize that, as previously amended, Claim 7 may have inadvertently read on the system of Haessig. Accordingly, Applicants would like to thank the Examiner for his thoroughness during the prosecution of this case. However, in view of the amendments made herein, Applicants believe that amended Claim 7 now clearly distinguishes over the prior art of record, because the prior art does not teach or suggest all the limitations of amended Claim 7 and, therefore, cannot establish a prima facie case of obviousness with respect to Claim 7.

Claims 8 and 9 depend directly from Claim 7 and are therefore distinguished from the cited prior art for at least the reasons provided with respect to Claim 7.

Claim 22

As previously amended, Claim 22 recites:

22. A method of installing a ventilation flow control unit, comprising:
assembling a flow control unit by mounting a flow controller to a duct, mounting a flow sensor to said duct, and mounting a thermal coil to said duct including securing at least one fluid line of said thermal coil to said duct and mounting an automatic valve in said fluid line; and
installing said assembled flow control unit in a ventilation system.
(emphasis added)

As discussed above with respect to Claim 7, the cited references, either alone or in combination, do not teach or suggest a step of “installing said assembled flow control unit in a ventilation system,” as recited by Claim 22. Therefore, because the cited prior art does not teach or suggest every element of Claim 22, no prima facie case of obviousness is established with respect to Claim 22.

Claims 1, 2, 4-6, 20, and 28

Claims 1, 2, 4-6, 20, and 28 are rejected under 35 U.S.C. § 103 as being unpatentable over Haessig (USPN 5,005,636) in view of Noboru (JPN 404363695). The Examiner writes:

Noboru shows a ventilation system similar to Haessig, which has an isolation valve 7, which is used to prevent air contamination from within building 2 escaping to the outside environment. In order to achieve this function it would be obvious to so provide Haessig.

Applicants request reconsideration in view of the amendments made herein.

Claims 1, 2, and 4-6

As amended herein, Claim 1 recites:

1. A ventilation flow control unit comprising:
a plenum;
a flow controller mounted to said plenum;
an isolation valve fixed to said plenum to selectively block the flow of air between said plenum and said flow controller; and
a flow sensor mounted to said plenum; and
wherein said ventilation flow control unit can be installed as a single component.
(emphasis added)

As discussed above with respect to Claim 7, Haessig does not teach or suggest a ventilation flow control unit that “can be installed as a single component,” as recited by amended Claim 1. Similarly, Noboru also does not teach such a unit, but rather a ventilation system for a nuclear reactor building. In either case, there is no indication that various components of the ventilation systems taught by the prior art can be installed as a single component. Therefore, because the cited references, either alone or in combination, do not teach or suggest every element of amended Claim 1, no prima facie case of obviousness can be established with respect to Claim 1.

Claims 2 and 4-6 depend either directly or indirectly from Claim 1 and are therefore distinguished from the cited prior art for at least the reason provided with respect to amended Claim 1.

Claims 20 and 28

Claims 20 and 28 are each independent method claims and recite the step of “installing said assembled flow control unit in a ventilation system.” As discussed above, the cited references, either alone or in combination, do not teach or suggest such a step. Therefore, because the cited references do not teach or suggest every element of Claims 20 and 28, no prima facie case of obviousness is established with respect to Claims 20 and 28.

For the above reasons Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103.

Additional Amendments

Claim 37 is amended to correct an inadvertent dependency error. No new matter is entered.

For the foregoing reasons, Applicants believe Claims 1-2, 4-6, 7-9, 11-13, 14-20, 22, 25, and 26-42 are in condition for allowance. Should the Examiner undertake any action other than allowance of Claims 1-2, 4-6, 7-9, 11-13, 14-20, 22, 25, and 26-42, or if the Examiner has any questions or suggestions for expediting the prosecution of this application, the Examiner is requested to contact Applicants' attorney at (269) 279-8820.



App. Serial No.: 10/092,933
Atty. Docket No.: 0003-029

Respectfully submitted,

Date: 2/17/04

Larry E. Henneman, Jr.

Larry E. Henneman, Jr., Reg. No. 41,063
Attorney for Applicant(s)
Henneman & Saunders
714 W. Michigan Ave.
Three Rivers, MI 49093

CERTIFICATE OF FACSIMILE TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being transmitted via facsimile, on the date shown below, to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, at (703) 872-9302

Date: 2/17/04

Larry E. Henneman, Jr.
Larry E. Henneman, Jr.